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EXAMINER	
MOBIN, HASANUL	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/814,773	LAWRENCE ET AL.	
	Examiner	Art Unit	
	HASANUL MOBIN	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,10-12,16-20,23-25,38,41 and 54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10-12,16-20,23-25,38,41 and 54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/18/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 15, 2009 has been entered.

2. Claims 8-9, 13-15, 21-22, 26-37, 39-40 and 42-53 have been cancelled and claim 54 has been added. Therefore, claims 1-7, 10-12, 16-20, 23-25, 38, 41 and 54 are pending in the application for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 3-5, 10, 38 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al. (US Patent No. 6,631,345, 'Schumacher', hereafter) in view of Weber et al. (US Patent Number 5,305,205, 'Weber', hereafter).

Regarding claim 1, Schumacher teaches a computer implemented method for a capture processor executing on a computer to determine an event associated with an application (*A method, system, and computer program product for emulating a sequence of events resulting from user interaction with an applet in which the storing and retrieval of queued event objects is facilitated through the use of an index to a component vector, Schumacher, Abstract and Col 2, lines 14-17*), comprising:

receiving, with the capture processor, a plurality of keystrokes associated with the application; processing, with the capture processor, each keystroke to determine an associated action in the application the plurality of keystrokes forming a plurality of associated actions (*Schumacher, FIG. 1, includes an automator. The applet event recorder 100 with Automator 102, when invoked, provides the user with a graphical user interface for associating an applet 108 that is to be monitored and for selecting user interaction extent types for monitoring. Automator 102 then places automator listener objects 104 on components of applet 108. Automator listeners 104 are suitably configured to store detected events to an automator queue 106 as queued event objects. If, for example, it is desirable to record only keyboard entries such as by way of*

AWT Key Event object, automator 102 provides a simple and friendly user interface enabling one to select one or more of multiple types of events that may be recorded, Schumacher, Col 4, lines 41-65);

selectively indexing the complete event responsive to determining that the complete event occurred (*capturing and storing keyboard entries and selectively queued them, Schumacher, Col 4, line 60 - Col 5, line 12 and Col 2, lines 14-35*).

Schumachar does not teach that

analyzing, with the capture processor, the plurality of associated actions to determine whether a complete event has occurred in the application.

However, Weber teaches that

analyzing, with the capture processor, the plurality of associated actions to determine whether a complete event has occurred in the application (Weber, Col 5, lines 37-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar and Tervo before him/her to modify Schumachar with the teaching of Weber 's computer-assisted transcription apparatus. One would have been motivated to do so for the benefit of having an improved word processing and transcription system for generating a display list of words and phrases following an initial entry of some or all letters of text by a user for enabling the user to selectively enter a word or phrase from the list into a word processor as taught by Weber (Col 2, lines 8-13).

Regarding claim 3, Schumachar does not teach that wherein the analyzing determines that a complete event has occurred responsive to the plurality of associated actions indicating that a complete word has been entered into the application.

However, Weber teaches that wherein the analyzing determines that a complete event has occurred responsive to the plurality of associated actions indicating that a complete word has been entered into the application (Weber, Col 5, lines 5-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar and Weber before him/her to modify Schumachar with the teaching of Weber 's computer-assisted transcription apparatus. One would have been motivated to do so for the benefit of having an improved word processing and transcription system for generating a display list of words and phrases following an initial entry of some or all letters of text by a user for enabling the user to selectively enter a word or phrase from the list into a word processor as taught by Weber (Col 2, lines 8-13).

Regarding claim 4, Schumachar does not teach that wherein the analysis determines that a complete word has been entered responsive to the plurality of associated actions indicating that a space or a punctuation symbol has been entered.

However, Weber teaches that wherein the analysis determines that a complete word has been entered responsive to the plurality of associated actions indicating that a space or a punctuation symbol has been entered (Weber, Col 5, lines 5-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar and Weber before

him/her to modify Schumachar with the teaching of Weber 's computer-assisted transcription apparatus. One would have been motivated to do so for the benefit of having an improved word processing and transcription system for generating a display list of words and phrases following an initial entry of some or all letters of text by a user for enabling the user to selectively enter a word or phrase from the list into a word processor as taught by Weber (Col 2, lines 8-13).

Regarding claim 5, Schumachar does not teach that wherein the analyzing determines that a complete event has occurred responsive to the plurality of associated actions indicating that a predetermined number of characters have been typed into the application.

However, Weber teaches that wherein the analyzing determines that a complete event has occurred responsive to the plurality of associated actions indicating that a predetermined number of characters have been typed into the application (Weber, Col 5, lines 5-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar and Weber before him/her to modify Schumachar with the teaching of Weber 's computer-assisted transcription apparatus. One would have been motivated to do so for the benefit of having an improved word processing and transcription system for generating a display list of words and phrases following an initial entry of some or all letters of text by a user for enabling the user to selectively enter a word or phrase from the list into a word processor as taught by Weber (Col 2, lines 8-13).

Regarding claim 10, Schumachar does not teach that an associated action comprises one of adding a character to a word, deleting a character from a word, inserting a character, overwriting a character, deleting a word, deleting a paragraph, selecting an item, and repositioning the cursor.

However, Weber teaches that an associated action comprises one of adding a character to a word, deleting a character from a word, inserting a character, overwriting a character, deleting a word, deleting a paragraph, selecting an item, and repositioning the cursor (Weber, Col 3, lines 40-42, 55-59 and Col 5, lines 5-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar and Weber before him/her to modify Schumachar with the teaching of Weber 's computer-assisted transcription apparatus. One would have been motivated to do so for the benefit of having an improved word processing and transcription system for generating a display list of words and phrases following an initial entry of some or all letters of text by a user for enabling the user to selectively enter a word or phrase from the list into a word processor as taught by Weber (Col 2, lines 8-13).

Regarding claim 38, although claim 38 is directed to a computer-readable storage medium, it is similar in scope to claim 1. It would be obvious to implement the method of claim 1 on a computer-readable storage medium; the method of claim 1 would inherently involve the need for the method to be implemented on a computer-readable storage medium. The method steps of claims claim 1 substantially

encompass the computer-readable storage medium recited in claim 38 therefore; claim 38 is rejected for at least the same reason as claim 1 above.

Regarding claim 54, Schumachar does not teach that the analyzing determines that a complete event has occurred responsive to the plurality of associated actions indicating that a predetermined number of words have been typed into the application.

However, Weber teaches that the analyzing determines that a complete event has occurred responsive to the plurality of associated actions indicating that a predetermined number of words have been typed into the application (Weber, Col 5, lines 5-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar and Weber before him/her to modify Schumachar with the teaching of Weber 's computer-assisted transcription apparatus. One would have been motivated to do so for the benefit of having an improved word processing and transcription system for generating a display list of words and phrases following an initial entry of some or all letters of text by a user for enabling the user to selectively enter a word or phrase from the list into a word processor as taught by Weber (Col 2, lines 8-13).

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al. (US Patent No. 6,631,345, 'Schumacher', hereafter) in view of Weber et al. (US Patent Number 5,305,205, 'Weber', hereafter) and further in view of Gray et al. (US patent Application No. 2005/0060719, 'Gray', hereafter).

Regarding claim 2, Schumachar and Weber do not teach that wherein the analyzing comprises analyzing a plurality of associated actions that occurred after a change in focus from another application to the application to determine whether a complete event occurred.

However, Gray teaches that wherein the analyzing comprises analyzing a plurality of associated actions that occurred after a change in focus from another application to the application to determine whether a complete event occurred ("Open" command prompts the user for the name of an existing file and loads it (i.e., change in focus). "View" command allows the user to view the XML of the currently loaded file. "Save" command prompts the user for the file name and saves the currently loaded file (i.e., display calls after change in focus), Gray, [0041-0042] and [0039]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar, Weber and Gray before him/her to further modify Schumachar with the teaching of Gray 's capturing and processing user events on a computer system for recording and playback. One would have been motivated to do so for the benefit of capturing and processing user events that are associated with screen objects that appear on a computer display device. User events may be captured and recorded so that the user events may be reproduced either at the user's computer or at another computer as taught by Gray ([0006]).

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al. (US Patent No. 6,631,345, 'Schumacher', hereafter) in view of Weber et al. (US Patent Number 5,305,205, 'Weber', hereafter) and further in view of Yee et al. (US Patent No. 6,380,924, 'Yee', hereafter, previously provided).

Regarding claim 6, Schumachar and Weber do not teach that updating, with the capture processor, a capture state after each keystroke is processed.

However, Yee teaches that updating, with the capture processor, a capture state after each keystroke is processed (in the MCR environment, one can record all the keystrokes and mouse actions to play the event of an action such as open file, save file etc. in a word processing software, Yee, Col 4, lines 39-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar, Weber and Yee before him/her to further modify Schumachar as modified with the teaching of Yee's mouse/keyboard capture recorder (MCR) apparatus and methodology. One would be motivated to do so for the benefit of recording all the keystrokes and mouse actions needed to take the user to the data entry point of any application as taught by Yee (Yee, Col 4, lines 39-43).

Regarding claim 7, Schumachar and Weber do not teach that updating, with the capture processor, a current user state based at least in part on the event.

However, Yee teaches that updating, with the capture processor, a current user state based at least in part on the event (in the MCR environment, one can record all

the keystrokes and mouse actions to play the event of an action such as open file, save file etc. in a word processing software, Yee, Col 4, lines 39-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar, Weber and Yee before him/her to further modify Schumachar as modified with the teaching of Yee's mouse/keyboard capture recorder (MCR) apparatus and methodology. One would be motivated to do so for the benefit of recording all the keystrokes and mouse actions needed to take the user to the data entry point of any application as taught by Yee (Yee, Col 4, lines 39-43).

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumacher et al. (US Patent No. 6,631,345, 'Schumacher', hereafter) in view of Weber et al. (US Patent Number 5,305,205, 'Weber', hereafter) and further in view of Tervo et al. (US Patent Number 6,907,577, provided by the applicant's IDS).

Regarding claim 11, Schumachar and Weber do not teach that the associated action is determined based at least in part by matching a keystroke to a keystroke table and wherein the keystroke table is associated with the application and wherein different applications are associated with different keystroke tables.

However, Tervo teaches that the associated action is determined based at least in part by matching a keystroke to a keystroke table and wherein the keystroke table is associated with the application and wherein different applications are associated with

different keystroke tables (*Tervo discloses a keystroke database having a number of keystrokes associated with a number of screens. Each keystroke may perform a different function or be associated with a different field based upon which screen of the possible screens that is currently active. Tervo also discloses a computer program determines that the ALT key in combination with another key has been depressed on a keyboard. It then identifies the current screen that is active. It then accesses a keystroke database to determine a field or function associated with the key depressed and the screen that is currently active. Then it activates the field locator module when the keystroke database indicates a field is desired for the key depressed, or it activates a function when the keystroke database indicates a function is desired for the key depressed, Tervo, Abstract and Col 2, lines 3-28. Tervo, Col 5, lines 30-46 and Fig. 6 illustrates that when a user presses ALT C – ALT Q the processor captures these actions, matches with the Keystroke database as in Fig. 2 and produce a blank client field and calls the client building function as an event. For similar actions and events please see Tervo, Col 5, line 47 – Col 6, line 12 and Fig. 7-8*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar, Weber and Tervo before him/her to modify Schumachar with the teaching of Tervo's system and method for accessing screen fields, functions and programs using a simple single key stroke. One would have been motivated to do so for the benefit of having a keystroke database where the keystrokes are associated with the applications active screen and windows and each keystroke may perform a different function or be associated with a different

field based upon which screen of the possible screens that is currently active as taught by Tervo (Tervo, Col 2, lines 1-15).

Regarding claim 12, Schumachar and Weber do not teach that the associated action is determined based at least in part by matching a keystroke to a generic keystroke table common to a plurality of applications.

However, Tervo teaches that the associated action is determined based at least in part by matching a keystroke to a generic keystroke table common to a plurality of applications (*Tervo discloses a keystroke database having a number of keystrokes associated with a number of screens. Each keystroke may perform a different function or be associated with a different field based upon which screen of the possible screens that is currently active. Tervo also discloses a computer program determines that the ALT key in combination with another key has been depressed on a keyboard. It then identifies the current screen that is active. It then accesses a keystroke database to determine a field or function associated with the key depressed and the screen that is currently active. Then it activates the field locator module when the keystroke database indicates a field is desired for the key depressed, or it activates a function when the keystroke database indicates a function is desired for the key depressed, Tervo, Abstract and Col 2, lines 3-28. Tervo, Col 5, lines 30-46 and Fig. 6 illustrates that when a user presses ALT C – ALT Q the processor captures these actions, matches with the Keystroke database as in Fig. 2 and produce a blank client field and calls the client building function as an event. For similar actions and events please see Tervo, Col 5, line 47 – Col 6, line 12 and Fig. 7-8*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Schumachar, Weber and Tervo before him/her to modify Schumachar with the teaching of Tervo's system and method for accessing screen fields, functions and programs using a simple single key stroke. One would have been motivated to do so for the benefit of having a keystroke database where the keystrokes are associated with the applications active screen and windows and each keystroke may perform a different function or be associated with a different field based upon which screen of the possible screens that is currently active as taught by Tervo (Tervo, Col 2, lines 1-15).

9. Claims 16-18 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. (US patent Application No. 2005/0060719, 'Gray', hereafter) in view of Schumacher et al. (US Patent No. 6,631,345, 'Schumacher', hereafter).

Regarding claim 16, Gray teaches that a computer-implemented method for a capture processor executing on a computer to determine and selectively index an event associated with an application (*a user interface supports a plurality of commands through a window that is displayed at the user's computer. The command types include recording user events, saving a file representing the user events, loading the file, playing back the file to reproduce the user events, viewing the file, and adding notes to the file, Gray, [0010]*), comprising:

receiving, with the capture processor, a plurality of display calls associated with the application (*event engine receives and evaluates "record" command from user interface, Gray, [0043], Fig. 4, 405. User events may be captured and recorded so that the user events may be reproduced either at the user's computer or at another computer. An event engine is instructed, through a user interface, to capture and to process a user event that is applied to a screen object, Gray, Abstract*);

processing, with the capture processor, the plurality of display calls to determine a display produced by the application (*Gray, [0010] and [0043]*);

analyzing, with the capture processor, the display produced by the application to determine whether a complete event has occurred in the application (*event engine receives and evaluates "record" command from user interface. Event engine captures user events though the Windows system hooks or the Active Accessibility API in step. Event engine processes information from the API and forms an event entry in a file, Gray, [0043], Fig. 4, steps 407, 409 and Abstract*);

determining, with the capture processor, an importance of the complete event (*user interface supports a plurality of command such as "open", "View", "record", "saving" etc. within the currently loaded file (i.e., application in focus and importance of the complete event), Gray, [0042]*); and

Gray does not teach that

selectively indexing, with the capture processor, the complete event responsive to the importance of the complete event.

However, *Schumachar* teaches that selectively indexing, with the capture processor, the complete event responsive to the importance of the complete event (*capturing and storing keyboard entries and selectively queued them, Schumacher, Col 4, line 60 - Col 5, line 12 and Col 2, lines 14-35*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Gray and Schumachar before him/her to modify Gray with the teaching of Schumachar's recording, storing, and emulating user interaction events. One would have been motivated to do so for the benefit of capturing, storing and selectively queued user interactions such as keyboards entries and events as taught by Schumacher (Col 2, lines 14-35).

Regarding claim 17, Gray as modified teaches that wherein the analyzing comprises analyzing a plurality of display calls associated with the application that occurred after a change in focus from another application to the application to determine whether a complete event occurred *("Open" command prompts the user for the name of an existing file and loads it (i.e., change in focus). "View" command allows the user to view the XML of the currently loaded file. "Save" command prompts the user for the file name and saves the currently loaded file (i.e., display calls after change in focus), Gray, [0042]*).

Regarding claim 18, Gray as modified teaches that wherein the analyzing determines that a complete event has occurred responsive to the display indicating that a complete word has been entered into the application (*Gray, FIG. 2 illustrates that a user is manipulating a mouse and a keyboard to generate user events that are*

associated with an application 205. In the embodiment, application 205 is a software program, including a database manager, spreadsheet, communications package, graphics package, word processor, and web browser. The user is operating on desktop 201. For example, the user may click or double-click on a screen object (associated with application 205) or may enter text into a window corresponding to application 205. The user may activate the capturing and processing of user events by entering commands through a user interface 207 such as entering a record command, Gray, [0036]).

Regarding claim 41, although claim 41 is directed to a computer-readable medium, it is similar in scope to claim 16. It would be obvious to implement the method of claim 16 on a computer-readable medium; the method of claim 16 would inherently involve the need for the method to be implemented on a computer-readable medium. The method steps of claims claim 16 substantially encompass the computer-readable medium recited in claim 41 therefore; claim 41 is rejected for at least the same reason as claim 16 above.

10. Claims 19-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. (US patent Application No. 2005/0060719, 'Gray', hereafter) in view of Schumacher et al. (US Patent No. 6,631,345, 'Schumacher', hereafter) and further in view of Jade et al. (US Pub Number 2003/0001854, provided by the applicant's IDS).

Regarding claim 19, Gray and Schumacher do not teach that updating, with the capture processor, a capture state after each display call is processed.

However, Jade teaches that updating, with the capture processor, a capture state after each display call is processed (the patches allow for the capture of the various graphics primitives (display calls) and associated attributes of the primitives that are drawn to the user interface, Jade, [0011], lines 15-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Gray, Schumachar and Jade before him/her to further modify Gray with the teaching of Jade's capturing graphics primitives associated with any display object rendered to a graphical user interface. One would have been motivated to do so for the benefit of capturing the one or more graphics primitives associated with an application as it is in execution and applying them directly to any controls, buttons, windows and/or any other display objects that can be invoked by an application with respect to the operating system as taught by Jade ([0010]).

Regarding claim 20, Gray and Schumacher do not teaches that updating, with the capture processor, a current user state based at least in part on the event

However, Jade teaches that updating, with the capture processor, a current user state based at least in part on the event (a "calling process" is the process that utilizes the invention to capture the one or more graphics primitives of a display object (display elements) that can be invoked by the various application programs on the computer, Jade, [0023]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Gray, Schumachar and Jade before him/her to further modify Gray with the teaching of Jade's capturing graphics primitives associated with any display object rendered to a graphical user interface. One would have been motivated to do so for the benefit of capturing the one or more graphics primitives associated with an application as it is in execution and applying them directly to any controls, buttons, windows and/or any other display objects that can be invoked by an application with respect to the operating system as taught by Jade ([0010]).

Regarding claim 23, Gray and Schumacher do not teaches that the display is determined at least in part by using an array of a current state of the display and updating the array with the display call, and wherein the analyzing comprises analyzing the array to determine whether a complete event has occurred.

However, Jade teaches that the display is determined at least in part by using an array of a current state of the display and updating the array with the display call, and wherein the analyzing comprises analyzing the array to determine whether a complete event has occurred (This descriptive information can include parameters such as the type of display object (dialog box, menu, window, etc.) and its current state (active/inactive). Context information also includes system information such as the API calls and/or function calls made by the target application to render the display object to a user interface, the object handle or resource ID, the specific location of files called during execution of the display object, and any other information that provides a general

context for the text that is displayed to the user interface screen 191 during the execution of the target process or application, Jade, [0026]. In addition it is also well known in the art that display is an array of the pixels and the current state of the display would be determined by the array of the pixels).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Gray, Schumachar and Jade before him/her to further modify Gray with the teaching of Jade's capturing graphics primitives associated with any display object rendered to a graphical user interface. One would have been motivated to do so for the benefit of capturing the one or more graphics primitives associated with an application as it is in execution and applying them directly to any controls, buttons, windows and/or any other display objects that can be invoked by an application with respect to the operating system as taught by Jade ([0010]).

Regarding claim 24, Gray and Schumacher do not teaches that

However, Jade teaches that the display is determined at least in part by constructing display items based at least in part on display positions of the display calls (a display object is invalidated each time a user resizes the display object or moves it to a different position within the user interface, Jade, [0039]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Gray, Schumachar and Jade before him/her to further modify Gray with the teaching of Jade's capturing graphics primitives associated with any display object rendered to a graphical user interface.

One would have been motivated to do so for the benefit of capturing the one or more graphics primitives associated with an application as it is in execution and applying them directly to any controls, buttons, windows and/or any other display objects that can be invoked by an application with respect to the operating system as taught by Jade ([0010]).

Regarding claim 25, Gray and Schumacher do not teaches that

However, Jade teaches that processing the plurality of display calls to determine a display comprises analyzing one or more of the x,y coordinates, lengths, and relative positions of a plurality of items written to the display using display calls (Jade teaches the graphics primitives include drawing elements (display items) such as text characters or strings, lines, arcs, polygons, etc., and have associated attributes that define its visual appearance such as font size, line length, and arc length, Jade, [0023], lines 7-11. In addition, the x,y coordinates and relative positions are well known in the art especially in graphical user interface (GUI)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the teachings of Gray, Schumachar and Jade before him/her to further modify Gray with the teaching of Jade's capturing graphics primitives associated with any display object rendered to a graphical user interface. One would have been motivated to do so for the benefit of capturing the one or more graphics primitives associated with an application as it is in execution and applying them directly to any controls, buttons, windows and/or any other display objects that can

be invoked by an application with respect to the operating system as taught by Jade ([0010]).

Response to Arguments

11. Applicant's arguments with respect to claims 1-7, 10-12, 16-20, 23-25, 38, 41 and 54 have been considered but are moot in view of the new ground(s) of rejection in view of Schumacher et al. (US Patent No. 6,631,345), Weber et al. (US Patent Number 5,305,205) and Gray et al. (US patent Application No. 2005/0060719).

12. In response to applicant's arguments on pages 9-12 about amended claims 1, 3, 4 and 16, against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, combination of new references teaches the argued amended limitation of the claims and respectfully submitted herein above in the rejection of the claims.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HASANUL MOBIN whose telephone number is (571)270-1289. The examiner can normally be reached on Monday Thru Friday 5:30 to 1:00 and Saturday. If attempts to reach the examiner by telephone are unsuccessful,

the examiner's supervisor, Tim Vo can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Tim T. Vo/
Supervisory Patent Examiner, Art Unit 2168

/H. M./
Examiner, Art Unit 2168